6.

Eastern Pacific Expeditions of the New York Zoological Society. XXIII.

Polychaetous Annelids from the West Coast of Mexico and Central America.¹

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(Text-figures 1-21).

17 Family Leodicidae

Leodice longisetis

		running account and	
stematic Account. Family Amphinomidae Hermodice carunculata Kinberg. Notopygos ornata Grube Chloria euglochis Ehlers. Eurythoe complanata Pallas Eurythoe oculata sp. nov.	17 18 18 18	Leodice longisetis Webster Leodice paloloides Moore Diopatra ornata Moore Hyalinoecia juvenalis Moore Arabella pacifica sp. nov. Family Amphictenidae Pectinaria gouldii Verrill	22 22 22 23
Family Polynoidae Lepidasthenia picta Treadwell Lepidasthenia elegans sp. nov Halosydna brevisetosa Kinberg	18 19	Family Opheliidae Ammotrypane bermudiensis Treadwell Family Capitellidae	
Family Sigalionidae Eupholoe nuda Treadwell Polyodontes californicus sp. nov	20 20	Notomastus sp Family Glyceridae Hemipodus mexicanus Chamberlin	
Family Aphroditidae Aphrodita Linnaeus Family Phyllodocidae	21	Family Chlorhaemidae Stylarioides sp	23
Phyllodoce oculata Ehlers	21	Family Terebellidae Terebella gorgonae Munro Terebellides stroemi Sars	23 23
Family Tomopteridae Tomopteris opaca Treadwell Family Typhloscolecidae	22	Family Sabellidae Sabella melanostigma Schmarda	23
Travisiopsis atlantica Treadwell	22	Bibliography	24

[This is the twenty-third of a series of papers dealing with the collections of the Eastern Pacific Expeditions of the New York Zoological Society made under the direction of Dr. William Beebe. The present paper is concerned with specimens taken on the Eastern Pacific Zaca (1937–1938) Expedition, which was made possible through the generosity of Mr. Templeton Crocker. For data on localities, dates, dredges, etc., refer to Zoologica, Vol. XXIII, No. 14, pp. 287–298.]

INTRODUCTION.

The following is a taxonomic account of 30 species of polychaetous annelids collected by Dr. William Beebe on the Eastern Pacific Zaca Expedition in 1937–1938. Five new species are

¹ Contribution No. 613, Department of Tropical Research, New York Zoological Society.

included in the collection. They were collected from off Cedros Island, Lower California, on the north to Panama Bay on the south.

The catalogue numbers all refer to specimens in the collections of the Department of Tropical Research of the New York Zoological Society.

Systematic Account.

FAMILY AMPHINOMIDAE.

Hermodice Kinberg.

Hermodice carunculata Kinberg.

Hermodice carunculata Kinberg, 1857, p. 13.

Collected at Arriba Isthmus, Port Parker, Costa Rica, January 17, 1938, Cat. No. 3,882A.

Notopygos Grube. Notopygos ornata Grube.

Notopygos ornata Grube, 1856, p. 55.

Collected at Station 203: D-9 (Port Parker, Costa Rica, January 22, 1938, 2 fathoms), Cat. No. 381,093.

Chloeia Savigny. Chloeia euglochis Ehlers.

Chloeia euglochis Ehlers, 1887, pp. 18–24; pl. 1, figs. 1, 2; pl. 2, figs. 1–8; pl. 3, figs 1–4.

Collected at Station 195: D-9 (Port Guatulco, Mexico, December 5, 1937, in 7 fathoms), Cat. No. 37,477. Collected at Port Guatulco, Mexico, December 5, 1937, in fish trap at 7 fathoms. Color plate Z-118, Cat. No. 37,429. Station 221: D-1 (Gulf of Chiriqui, Panama, March 13, 1938, 35 fathoms), Cat. No. 38,659.

Specimen 37,477. Dorsal surface iridescent purplish-gray with a wide blackish band down the middle of each side within which are numerous oblique yellow streaks. On the mid-dorsal line of each segment are a pair of longitudinal, slightly oblique yellow lines. Tentacles and dorsal cirri greenish-black; setae bright orange. Gills greenish-brown, with a central yellow band on each stem.

Eurythoe Kinberg. Eurythoe complanata Pallas.

Eurythoe complanata Pallas, Teste McIntosh. McIntosh, 1885 (as E. pacifica Kinberg), pp. 27, 28; pl. 2, figs. 3, 4; pl. 3, fig. 3; pl. 2A, fig. 13; pl. 3A, figs 5-9.

Collected at Station 195: D-15 and D-16 (Port Guatulco, Mexico, December 6, 1937, in 1½ fathoms), Cat. No. 37,526. Sihuatanejo, Mexico, November 24, 1937, in coral, Cat. No. 37,266. Station 196: D-18 (Tangola-Tangola Bay, Mexico, December 13, 1937, 30 fathoms), Cat. No. 37,743. Abajo Rocks, Port Parker, Costa Rica, January 22, 1938, tide-pool, Cat. No. 381,094.

Eurythoe oculata sp. nov.

(Text-figures 1-3).

A single specimen. The body is broken and more or less macerated near its middle so that accurate measurements are impossible but it is approximately 180 mm. long. The greatest width, 10 mm., is at about the end of the anterior third of the body length. The prostomial width is 1 mm.

The prostomium (Text-fig. 1), is ovate with its broader end anterior, and has two pairs of prominent eyes. The anterior tentacles are slender and reach as far as to the anterior prostomial border. The median tentacle is relatively long, is attached at the level of the posterior eyes and extends to the anterior border of the anterior ones. The

tentacles are colorless, as is the prostomium. The caruncle is very small and inconspicuous and is attached to the dorsal border of the first somite (Text-fig. 1). This prostomium has certain resemblances to that of *E. dubia* Horst as redefined by Munro (1933, p. 5), but is longer in proportion to width than in his figure 1, the eyes are much more prominent and the tentacles more slender. Horst (1912, p. 37), and Munro describe the caruncle as flexuous though this is more clearly shown in Horst's figure than in Munro's. In oculata it is hardly more than a rounded papilla.

The parapodial lobes are widely separated. The dorsal cirrus is prominent and lies anterior to the tuft of gills. Two dorsal aciculae with rounded ends protrude to the surface at the base of the cirrus and three similar aciculae occur in the neuropodium (Text-fig. 2). The ventral cirrus is a rounded cone. The notosetae make up a dense tuft, are all alike, long, slender and sharppointed. Sometimes it is possible to see on the shafts the denticles figured by Horst (loc. cit., pl. 10, fig. 7), but generally they seem smooth. I am uncertain what he meant by "dimples" on the shafts, and can find nothing that would answer to this description. The neurosetae (Text-fig. 3), are heavy, with apices bluntly rounded and an also bluntly rounded, subapical tooth.

The gills first appear on the third somite and when well developed consist of a tuft of 12 or more filaments arising from a common base just behind the insertion of the dorsal cirrus. A few filaments may be simple but most are at least 2-branched and some are irregularly dichotomously divided into as many as 6 branches.

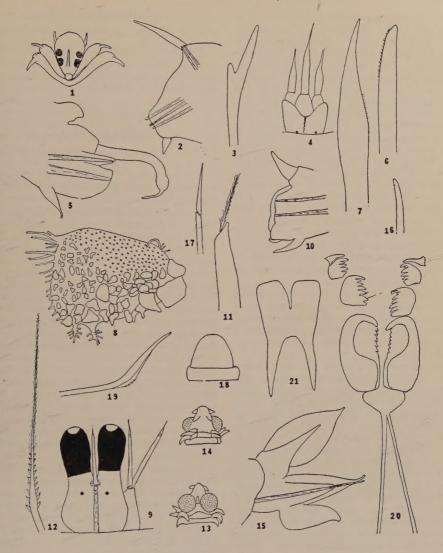
The type was collected at the dock in Balboa, Panama, July 25, 1933. It is a female with eggs, and is No. 3,319 in the collection of the Department of Tropical Research of the New York Zoological Society.

FAMILY POLYNOIDAE.

Lepidasthenia Malmgren. Lepidasthenia picta Treadwell.

Lepidasthenia picta Treadwell, 1928, pp. 456, 457; fig. 177; figs. 10–13.

A single specimen in this collection makes possible additions and corrections to the original diagnosis. The drawing (loc. cit., fig. 10), shows a dividing line between the lateral prolongation of the prostomium and the cirrophore of the tentacle. This is incorrect. The cirrophore is a prolongation of the prostomium. In the type the palps and elytra were missing. In the Zaca material the former show as stout structures shorter than the median tentacle and having acuminate tips. The anterior elytra are approximately circular in outline and cover the tentacles which may be seen through them. The anterior dorsal margin of the elytron is faintly tinged with black and there is a small black spot ventral to the point of elytrophore attachment. Later elytra are more lateral in position, leaving a con-



Text-figures 1-21.

1-3. Eurythoe oculata sp. nov. 1, head \times 7; 2, parapodium \times 6; 3, neuroseta \times 62. 4-7. Lepidasthenia elegans sp. nov. 4, head \times 12; 5, parapodium \times 20; 6, notoseta \times 180; 7, neuroseta \times 180. 8, Elytron of Eupholoe nuda Treadwell \times 25. 9-12. Polyodontes californicus sp. nov. 9, head \times 18; 10, parapodium \times 5; 11, seta \times 85; 12, seta \times 180. 13-17. Eulalia magnapupula sp. nov. 13, dorsal surface of head \times 10; 14, ventral surface of head \times 10; 15, parapodium \times 33; 16, seta \times 250; 17, seta \times 250. 18-21. Arabella pacifica sp. nov. 18, head \times 15; 19, seta \times 68; 20, maxilla \times 23; 21, mandible \times 23.

iderable portion of the dorsum exposed. While nterior elytra are lightly pigmented, throughout he median and posterior regions the pigmentation is dense except for a colorless spot over the dytrophore, this giving an occillated appearance of the dorsal surface. The elytra have neither narginal fringes nor surface spines. The body coloration is somewhat different from that of the type, indicating some degree of variability.

Collected at Station 203: D-9 (Port Parker, losta Rica, January 22, 1938, in 1½ to 4 fathms), Cat. No. 381,092.

Lepidasthenia elegans sp. nov.

(Text-figures 4-7).

Two specimens are in the collection, the type being incomplete. This is 25 mm. long and 10 mm. wide at the tenth somite. In the other, which is entire, the posterior region is badly preserved and it is impossible to determine the number of somites or of the elytra. The specimens are assigned to this genus subject to later correction. The prostomium (Text-fig. 4), is 1 mm, in diameter, is broader than long and has a

broad but not deep, anterior indentation into which fits the heavy cirrophore of the median tentacle. From the base of this indentation a dorsal groove runs posteriorly along the pros-tomial surface. The eyes are all near the pos-terior border, the posterior ones the smaller, nearer together and more or less covered by the margin of the first somite. The median cirrophore is heavy, its length rather more than half that of the prostomium. The style is about as long as the prostomium up to the point where it begins to taper and it has a slender terminal filament. Cirrophores of the lateral tentacles are short and stout, their styles shaped much like those of the median but only about two-thirds as long. The ventral tentacular cirrus is similar in form to the median tentacle, the dorsal one similar to the lateral tentacle but much more slender. The palps are slender and inconspicuous, hardly longer than the median tentacle. The first somite, carrying the elytrophore, is twice as wide as the prostomium, later ones increase in width up to the sixth.

The coloration is unlike in the two specimens, the type having five or six dark transverse bands on its dorsum in each somite, while the other has two irregular ones in this locality. Except for a slight tint near the apex of the palp there is no

color in the head region.

The parapodium has a much reduced notopodium into which a stout acicula extends, the neuropodium is much heavier and rounded at the apex, anterior and posterior lobes equal (Textfig. 5). The dorsal cirrus is on a heavy cirrophore whose diameter is more than half that of the parapodium, its style reaching considerably beyond the parapodium apex, slightly swollen near the end and terminating in a heavy filament. The ventral cirrus is very short, conical and has a slender tip. All but one of the notopodia examined had no setae, the exception having a single one. This was rather heavy, its apex bluntly rounded (Text-fig. 6), and it has transverse rows of teeth along one border, these being heavier than these in the represending. heavier than those in the neuropodium. There are about ten setae in the neuropodial group, these differing from one another mainly in size. They have rather heavy stalks which are swollen near the ends and then narrow to blunt points. Very small teeth, difficult to see unless the seta is in the proper position, occur along one margin of the swollen portion (Text-fig. 7).

The protruded pharynx is as long as the first seven somites. Dorsally and ventrally at its apex are marginal rows of nine papillae.

Anteriorly the elytra cover the dorsum. I am unable to say what the condition is in later somites. All elytra are circular in outline, the surface dotted with pigment spots and devoid of marginal filaments.

The specimens are recorded as commensal in a holothurian. They were collected at Station 126: D-14 (East of Cedros Island, Mexico in 45 fathoms), Cat. No. 3,773. The type is in the collection of the Department of Tropical Research of the New York Zoological Society.

Halosydna Kinberg.

Halosydna brevisetosa Kinberg.

Halosydna brevisetosa Kinberg, 1865, p. 85. Collected at Station 126: D-19 (S. E. of Cedros Island, Mexico, November 10, 1937, in 25 fathoms), Cat. No. 3,794.

FAMILY SIGALIONIDAE.

Eupholoe McIntosh. Eupholoe nuda Treadwell.

(Text-figure 8).

Eupholoe nuda Treadwell, 1936, pp. 53, 54; figs. 10–14.

As Eupholoe nuda I described a specimen from Bermuda in which I was uncertain whether all elytra had been lost or whether they had ever been present. The present collection contains one of this species with a full complement of elytra. They are decidedly lateral in position, leaving a considerable portion of the dorsum un-covered, and are essentially of the same form throughout the body. They, as well as the body surface, are covered with sand grains of which the largest on the elytra are those of the anterodorsal area, some of which protrude beyond the elytral border (Text-fig. 8). The smallest of the grains are at the posterodorsal region where there are also some long marginal filaments. On the posteroventral face are two branched filaments and small ones occur on the remainder of the border except for a small part of the dorsal region where there are neither filaments nor sand grains. At this region the elytral surface is dotted with small spines.

My earlier material showed two kinds of compound setae (loc. cit., figs. 13, 14), one much heavier than the other, the slender one with a subterminal tooth. The present material shows that the subterminal tooth is present on both kinds of setae but evidently is easily broken away. The setae differ, therefore, only in size.

Collected at Station 126: D-19 (S. E. of Cedros Island, Mexico, November 10, 1937, in 25 fathoms), Cat. No. 3,794.

${\it Polyodontes\ californicus\ sp.\ nov.}$

(Text-figures 9-12).

The type and only specimen is a fragment, measuring 25 mm. to the region of the 20th elytron, and has a width of 10 mm. The prostomial diameter is about 1 mm., each half continued into an ommatophore, the base of each ommatophore being at about half way of the total prostomial-eye length, the apex of the eye being a trifle wider than the width of the stalk. There is a lens at the end. The sessile eyes are a pair of small dark spots, one on either side (Text-fig. 9). The base of the median tentacle is at the level of these sessile eyes and its stalk very slender, its apex narrowing to a filamentous tip which does not quite reach the apex of the ommatophore. At base of median tentacle is a ring of brownish pig-

ent and a median caruncle-like ridge runs posriorly across the dorsal prostomial surface. The teral tentacles are similar to the median in form nd size but are not visible from the dorsal surce, being hidden beneath the ommatophores. ach has a pigmented ring at the base and anothjust proximal to the filamentous tip. The palps re slender, nearly three times as long as prostoium and ommatophores combined and are pig-ented near the apices. The basal portion of the entacular cirri extends as far as the base of the nmatophores, the styles slender, extending as r as the apex of the eyes, their apices abruptly nding in slender filaments. There is a band of rown pigment near the apex of the cirrophore ad the dorsalmost cirrus has pigment near its pex and another pigmented mass near its base.

The protruded pharynx extends 10 mm, beond the prostomium and at its apex is 7 mm,
ide. The dorsalmost terminal papilla of the
harynx is 4 mm, long and on either side of it a
bw of 7 broad, flattened papillae with acute
pices. The outermost one of each row is much
he smallest and in most of them is a dark spot.
he ventral median papilla is short, similar to,
ut a little larger than, the lateral ones of which
here are 6 on either side. There are two light
rown fangs with a single row of teeth on either

ide of each pair.

The protrusion of the pharynx produces enough istortion so that it is not possible to determine xactly the position of the anterior elytra. Eviently the first pair covers the prostomium and colorless except for a few widely distributed lack spots. The second is much smaller than he first, the third larger than the second but till smaller than the first. These have a few ark spots. The fourth is about as large as the hird and diffusely pigmented. Beginning with he fifth, a considerable area of the dorsal surface s uncovered by elytra and these assume a very haracteristic coloration and form. Each is aproximately oval in outline, its long axis vertical nd the outer end wider than the inner. Near he dorsal end is a densely pigmented band, eparated by a colorless band from the elytron nargin. From one-half to one-third of the elytron ron surface shows more or less pigmentation, the lensest portion being the dorsal area mentioned bove. The combined effect is that of two dark brown bands along the dorso-lateral surface of he body. A very faint brownish tint, due to umerous small transverse lines, marks the dorsal urface beneath the elytra. The remainder of he body is colorless. The first pair of ventral irri are very large, following ones successively maller, most reaching only to end of parapodium. The dorsal cirri are nearly of the same size hroughout.

A median parapodium has nearly equal anerior and posterior setal lobes and a spoonhaped lip underlying the neuropod (Text-fig. 10). The dorsal cirrus has a heavy cirrophore and a onical style reaching a short distance beyond he setal lobe. The ventral cirrus is much more lender, its acute tip just about reaching the end f the neuropod. There are three types of setae.

The first lie in the median portion of the row, have heavy brown shafts slightly enlarged and curved toward ends, apex obliquely truncated (Text-fig. 11). To this truncated portion is attached a slender terminal joint having fine hairs on its surface. Above and below these are slender setae, their apices very slender lanceolate in outline, the terminal portion covered by fine hairs. Another and larger tuft of colorless setae lies ventral to the heavy ones. These (Text-fig. 12) widen toward the ends and are curved. At the curve are toothed plates and beyond these, fine hairs cover the entire surface.

The gills are bladder-like structures on the dorsal parapodial surfaces and are most prominent on the elytra-bearing somites.

This species is here classed in the genus *Polyodontes*, because of the presence of gills. If, however, Chamberlin's synonymy is correct (1919, p. 86), *Polyodontes* is preoccupied and it should be listed as *Acoetes*.

The type was collected at Station 182: D-4 (Chamela Bay, Mexico, November 17, 1937, in 16 fathoms), Cat. No. 37,152, and is in the collection of the Department of Tropical Research of the New York Zoological Society.

Family Aphroditidae. Aphrodita Linnaeus.

Specimens of Aphrodita, all too badly preserved to admit of species identification, were collected at Station 189: D-2 (17 miles S. E. by E. of Acapulco, Mexico, November 29, 1937, in 20 fathoms), Cat. No. 37,742; Station 195: D-17 (Port Guatulco, Mexico, December 7, 1937, in 6 fathoms), Cat. No. 37,741; Station 214: D-3 and 4 (14 miles S. by E. of Judas Point, Costa Rica, March 1, 1938, in 50 and 61 fathoms), Cat. No. 38,409.

FAMILY PHYLLODOCIDAE.

Phyllodoce Savigny. Phyllodoce oculata Ehlers.

Phyllodoce oculata Ehlers, 1887, pp. 135-140; pl. 40, figs. 4-6.

Collected at Station 220: L-2 (Isla Parida, Gulf of Chiriqui, Panama, March 12, 1938, surface light), Cat. No. 38,650; Station 126: D-19 (S. E. of Cedros Island, Mexico, November 10, 1937, in 25 fathoms), Cat. No. 3,794.

Phyllodoce groenlandica Oersted.

Phyllodoce groenlandica Oersted, 1842–43. Teste McIntosh. McIntosh, 1908–10, pp. 86–88; pl. 58, fig. 5; pl. 68, figs. 4–6; pl. 78, fig. 7.

Collected at Station 223: L-1 (Bahia Hermosa, Coiba Island, Panama, March 19, 1938, at surface light), Cat. No. 38,760.

Eulalia magnapupula sp. nov.

(Text-figures 13-17).

Characterized by very large eyes and short

tentacles and cirri. Two specimens, of which the type is the larger but is incomplete. The smaller is 57 mm. long and in the anterior body region is 4 mm. in diameter to the ends of the setae. The posterior end is very narrow and possibly regenerating.

In the preserved material the anterior margin of the prostomium is rounded, the lateral margins straight and running directly into the eyes (Text-fig. 13). The paired tentacles are heavy cones hardly longer than wide, only the anterior ones visible from the dorsal surface. The median tentacle is inconspicuous and is situated at about the middle of the dorsal prostomial surface. The eyes are very large, either one being larger than the exposed portion of the prostomium. lenses are visible only from the sides. The tentacular cirri are one pair on the first somite, two pairs on the second and one pair on the third (Text-fig. 14). The cirrophores of dorsal one on second and third pairs are heavy and about as long as the styles. The style of the third pair is the longest but this barely reaches the third somite. The eyes are dark brown, the peristomial surface is marked by brown pigment, cirrophores of tentacular cirri dark brown, styles colorless. Anteriorly the body color is light brown with a tendency toward a transverse dark band near the anterior margin of the somite and a darker spot on the anterior margin of the parapodium. latter spot becomes more prominent posteriorly, and posterior to about the twenty-fifth somite is carried on a definite rounded lobe. The flattened dorsal cirri are more or less spotted with brown. Anteriorly on the ventral surface the pigmentation is diffuse, while posteriorly there is a dark spot at the base of each parapodium. On the midventral portion of each somite is an uncolored spot shaped like a thickened H which is prominent against the diffuse brown of the general surface. Neither specimen retains the anal cirri.

The parapodium is conical (Text-fig. 15), the posterior lip the longer and terminating in a filamentous tip, the acicula protruding from the surface by the side of this filament. Between the two lips arises a fan-shaped seta tuft. The dorsal cirrus is broad-lanceolate on a heavy cirrophore and reaches about as far as the end of the filament on the setal lobe. The ventral cirrus is shorter than the setal lobe, heavy, with recurved tip. There are two kinds of setae, the first simple, bluntly rounded and slightly curved at the tip (Text-fig. 16), the other compound, with a long basal joint, the terminal joint slender and sharp-pointed (Text-fig. 17).

In the type the pharynx is protruded to a distance equal (in preserved material), to the length of the first eight somites.

The type was collected at Station 225: T-1 (11 miles S. W. by S. of Jicaron Island, Panama, March 20, 1938, in 500 fathoms), Cat. No. 38,767. Another specimen was taken at Station 227: T-1 (20 miles S. W. of Morro de Puercos, Panama, March 21, 1938, in 500 fathoms), Cat. No. 38,789. The type is No. 38,767 in the collection of the

Department of Tropical Research of the Nev York Zoological Society.

FAMILY TOMOPTERIDAE.

Tomopteris Eschscholtz. Tomopteris opaca Treadwell.

Tomopteris opaca Treadwell, 1928, pp. 463, 464 fig. 178; fig. 29.

Collected at Station 210: T-10 (20 miles south of Cape Blanco, Costa Rica, February 27, 1938 in 500 fathoms), Cat. No. 38,391. Station 233 T-1 (55 miles south of Cape Corrientes, Colombia April 3, 1938, in 500 fathoms), Cat. No. 38,908

FAMILY TYPHOSCOLECIDAE.

Travisiopsis Levinsen.

Travisiopsis atlantica Treadwell.

Travisiopsis atlantica Treadwell, 1936, pp. 62 63; figs. 30–33.

Collected at Station 227: T-1 (20 miles S. W of Morro de Puercos, Panama, March 21, 1938 in 500 fathoms), Cat. No. 38,789.

FAMILY LEODICIDAE.

Leodice Savigny.

Leodice longisetis Webster.

Leodice (Eunice) longisetis Webster, 1884, pp 317, 318; pl. 10, figs. 46-49.

Collected at Sihuatenejo, Mexico, November 24, 1937, in coral, Cat. No. 37,266.

Leodice paloloides Moore.

Leodice paloloides Moore, (?) 1919, pp. 246–249 pl. 7, figs. 5–7.

Collected at Sihuatanejo, Mexico, November 24, 1937, in coral, Cat. No. 37,266A.

Diopatra Aud. et M. Ed. Diopatra ornata Moore.

Diopatra ornata Moore, 1911, pp. 273–277; pl. 18, figs. 77–85.

Collected at Station 196: D-18 (Tangola Tangola Bay, Mexico, December 13, 1937, in 30 fathoms), Cat. No. 37,645A.

Hyalinoecia Malmgren. Hyalinoecia juvenalis Moore.

Hyalinoecia juvenalis Moore, 1911, pp. 277-280; pl. 18, figs. 86–95.

Collected at Station 203: D-2 (Port Parker, Costa Rica, January 20, 1938, in 10 fathoms). Cat. No. 38,109A.

Arabella Grube.

Arabella pacifica sp. nov.

(Text-figures 18-21).

The body is broken about at its middle but the ntire animal is preserved, the total length being 60 mm. The body width is 3 mm., the protomial width 1.3 mm. The prostomium is bunded (Text-fig. 18) and no eyes are visible. he anterior parapodia are very small, later ones acrease in size but the posterior ones are small. here are two anal cirri, these being short with ounded ends. On the parapodia are prominent orsal lobes extending to the ends of the setae. etae are of only one kind (Text-fig. 19), having lender stalks widened and geniculate toward the xtremities with very sharp apices and a pair of oothed wings at the bend. In profile only one f the wings is visible and unless slightly tilted he marginal denticulations do not appear. In ach parapodium are three aciculae protruding only very slightly from the surface.

All mouth parts jet black. In the maxilla the terminal plate on either side has only one tooth Text-fig. 20). No. 2 has on either side a 6-toothed plate; No. 3 on either side 7 teeth. The forceps are heavy and overlie the proximal plates so that without destroying the specimen it was not possible to determine the precise number of teeth in each of the latter, but they extend as far as the forceps base and are toothed for the greater part of their length. Apparently also the inner margin of the forceps is toothed. The basal rods are very long, less than half of them being shown in the figure. The mandible is rectangular with a forked base (Text-fig. 21).

The type was collected at Sihuatanejo, Mexico, November 24, 1937, in coral, Cat. No. 37,266, and is in the collection of the Department of Tropical Research of the New York Zoological Society.

FAMILY AMPHICTENIDAE.

Pectinaria Lamarck. Pectinaria gouldii Verrill.

Pectinaria gouldii Verrill, 1873, p. 612; figs 87,

Collected off Ballenas Bay, Gulf of Nicoya, Costa Rica, February 26, 1938, in mangrove mud, Cat. No. 38,359A.

87A.

FAMILY OPHELIIDAE.

Ammotrypane Rathke.

Ammotrypane bermudiensis Treadwell.

Ammotrypane bermudiensis Treadwell, 1936, pp. 60, 61; figs. 24–26.

Collected at Station 208: D-3 (Piedra Blanca Bay, Costa Rica, February 5, 1938, in 4 fathoms), Cat. No. 38,187A.

FAMILY CAPITELLIDAE.

Notomastus Sars.

A single specimen of undetermined species was collected at Station 126: D-16 (East of Cedros Island, Mexico, November 10, 1937, 42 fathoms), Cat. No. 3,781.

FAMILY GLYCERIDAE.

Hemipodus Quatrefages.

Hemipodus mexicanus Chamberlin.

Hemipodus mexicanus Chamberlin, 1919, pp. 349-350; pl. 63, figs. 2-3.

Collected at Station 126: D-16 (East of Cedros Island, Mexico, November 10, 1937, in 42 fathoms), Cat. No. 3,781A.

FAMILY CHLORHAEMIDAE.

Stylarioides Della Chiaje. Stylarioides sp.?

Collected at Station 221: D-5 (Gulf of Chiriqui, Panama, March 13, 1938, in 35-40 fathoms), Cat. No. 38,659A.

FAMILY TEREBELLIDAE.

Terebella Linnaeus.

Terebella gorgonae Munro.

Terebella gorgonae Munro, 1933 A, pp. 1070, 1071, fig. 18.

Collected at Station 203: D-9 (Port Parker, Costa Rica, January 22, 1938, in 2 fathoms), Cat. No. 38,111.

Terebellides Sars. Terebellides stroemi Sars.

Terebellides stroemi Sars, 1835. Teste McIntosh. McIntosh, 1922, pp. 209–215; pl. 120, fig. 3; pl. 127, fig. 5.

Collected at Station 126: D-16 (East of Cedros Island, Mexico, November 10, 1937, in 42 fathoms), Cat. No. 3,781A.

A single specimen of an empty tube of a terebellid, strongly resembling that of *Lanice* figured by McIntosh (1885, pl. 49, fig. 4), was collected at Station 224: D-3 (Hannibal Bank, Panama, March 20, 1938, in 35 fathoms), Cat. No. 38,755.

FAMILY SABELLIDAE.

Sabella Linnaeus.

Sabella melanostigma Schmarda.

Sabella melanostigma Schmarda, 1861, p. 36. Ehlers, 1887, p. 263.

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